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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/738,358	12/05/2003	Guangming Dai	018158-022220US	8551

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EXAMINER
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MAI, HUY KIM

ART UNIT	PAPER NUMBER
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2873

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/01/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/738,358

Applicant(s)

DAI ET AL.

Examiner

Huy K. Mai

Art Unit

2873

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-81 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-81 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 May 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 101***

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 30-35 and 79-81 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The "prescription calculating module" in claim 79, the "polynomial expansion module" in claim 80, the "effective power module" in claim 80, the "prescription module" in claim 80 and the "effective power calculating module" in claim 81 are non-statutory matter since claims to software or a program that does not recite a tangible computer readable medium have been determined to be insufficient to be considered a machine, manufacture, or a process. See MPEP §2106 IV B I(a).

Regarding claim 30, the "optimizer" is non-statutory matter because it does not provide a tangible result. The specification (page 6, lines 26-29) defines that "The module may include data processing software and/or hardware, and may be optionally integrated with other data processing structures. The module may comprise an optimizer module that determines the prescription for the particular patient based on the set of patient parameters, using a goal function appropriate for presbyopia of an eye". It is clear that the optimizer, at least, includes data processing software; otherwise, the hardware or CPU (central processing unit) cannot be an optimizer.

The remaining claims are dependent upon the above rejected base claim and thus inherit the deficiency thereof.

### ***Double Patenting***

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-81 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-8 of copending Application No. 11/134,630. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims in the instant application are broader than those of the copending '630 application; therefore, any apparatus meeting the limitations of the copending '630 application would necessarily meet those of the instant application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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6. Claims 35 and 62 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The phrases “the iterative optimizer” (claim 35, line 1) and “the defined refractive shape” (claim 62, line 1) have no antecedent basis.

*Claim Rejections - 35 USC § 102*

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-13, 65-72, 75-77 and 79 are rejected under 35 U.S.C. 102(b) as being anticipated by Trachtman (5,002,384).

The limitations in claims 1-13, 65-72, 75-77 and 79 are shown in Trachtman's Fig. 1, column 13, line 45 through column 14, line 11. Trachtman discloses a system for measuring refraction error of the eye and/or treating the patient's eye. Based on the plane and/or the size of the pupil of the eye and the images of the single slit and double slits, the displacement therebetween the images on the retina corresponds to a measure of the refraction of the eye which can be translated into the appropriate prescription necessary for correction. Thus, the Trachtman's measurement of the eye's refraction translating into the appropriate prescription necessary for correction is inherently included means for determining and/or calculating and/or generating the appropriate prescription of the patient's eye.

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Regarding method claims 1-13, 65-72 and 75-77, the method steps consist of the broad steps of "measuring", "determining" and "calculating" etc and therefore these steps would be inherently satisfied by the apparatus of the reference.

*Allowable Subject Matter*

9. Claims 14-29 and 36-64 are allowed.
10. Claim 74 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
11. Claim 75 is objected to as being dependent upon the above objected claim.

NOTE: There is no prior art for applying to reject claims 30-35, 78, 80 and 81.

*Response to Arguments*

12. Applicant's arguments with respect to claims 1-13, 30-35, 65-81 have been considered but are moot in view of the new ground(s) of rejection.
13. In response to the provisional double patenting rejection to claims 1-81 over the copending application 11/134,630, the applicant informed "the provisional rejection is acknowledge." According MPEP section 804, the provisional rejection between the instant application and the copending application remains until it is the only remaining rejection, the examiner will, at that time, withdraw the provisional rejection and then allow the instant application. Such the rejection will apply to claims 1-8 of the copending application 11/134,630.

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It is advised that the applicant is, based on his knowledge, also responsible to bring discussion such a provisional rejection during the examining prosecution of the copending application.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huy Mai whose telephone number is (571) 272-2334. The examiner can normally be reached on M-F (8:00 a.m.-4:30 p.m.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky L. Mack can be reached on (571) 272-2333. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-1562.



Huy Mai  
Primary Examiner  
Art Unit 2873

HKM/  
January 31, 2007